FIRST RECORD OF *Scolopendra gigantea* LINNAEUS, 1758 (CHILOPODA: SCOLOPENDROMORPHA: SCOLOPENDRIDAE) FROM PANAMÁ

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SUMMARY

The large scolopendromorph centipede *Scolopendra gigantea* L., 1758 is registered for the first time from Panamá. This finding represents the most northwestern record of this species outside Coastal Venezuela Province that is not product of an accidental human introduction.

Key words: Centipedes, distribution, Myriapoda, Chagres National Park.

RESUMEN

El ciempiés escolopendromorfo gigante *Scolopendra gigantea* L., 1758 se registra por primera vez para Panamá. Este hallazgo representa el registro más noroccidental de ésta especie fuera de la Provincia de la Costa de Venezuela que no ha sido causado por introducción accidental humana.

Palabras clave: Ciempiés, distribución, Myriapoda, Parque Nacional Chagres.

The scolopendromorph *Scolopendra gigantea* Linnaeus, 1758 is the only centipede species that can grow to 27.46 cm long (Shelley & Kiser 2000, one specimen from Venezuela). Exclusive of the Neotropics, *S. gigantea* can be found in Aruba, Curaçao, Guyana, Margarita Island, Surinam, Trinidad, and Northern Venezuela and Colombia (Fig. 1). However, some specimens can be found in the US Virgin Islands, Haiti, México, and Honduras which could represent accidental human introductions or labeling errors (Shelley & Kiser 2000). Khanna & Yadav (2005) affirm the presence of *S. gigantea* among material deposited in the Museum of Western Regional Station, Zoological Survey of India; but Lewis (2010) considered its presence in India improbable, because the specimen was not described. A neotype was designated from Valencia, Carabobo, Venezuela by Shelley & Kiser (2000) because the brief original description gave no diagnostic features and was assigned to an illustration by P. Browne (1756) of a large centipede from Kingston, Jamaica, island where *S. gigantea* is not known

to be present (Shelley & Kiser 2000). A type specimen apparently never existed (Shelley 2006). Shelley & Kiser (2000) gave the following diagnostic characters for this species: cephalic plate with complete longitudinal sutures; forcipular coxosternite with transverse sulcus; first 7-10 antennomeres sparsely hirsute; first tergite with anterior transverse sulcus; tergal marginations beginning on tergites 4-5; and femora of most legs with one or more dorsoapical spurs. *Scolopendra gigantea* as defined by Shelley & Kiser (2000), possesses one or more dorsoapical spines on the femora of most legs. This feature is consistent in forms from Northern Colombia, Venezuela, and offshore islands, but an individual from Santarém, Pará Estado, Brazil (housed at the Zoological Institute and Museum, University of Hamburg, Germany, ZMUH), conforms to the diagnosis in all aspects except this; it has femoral spines on legs 17–20 only. The absence of spines from the first 16 leg pairs could represent simple variation or a difference that warrants taxonomic recognition at the specific or subspecific levels, but more material is needed from the lacuna between Santarém and the defined range of the species (Shelley 2006).

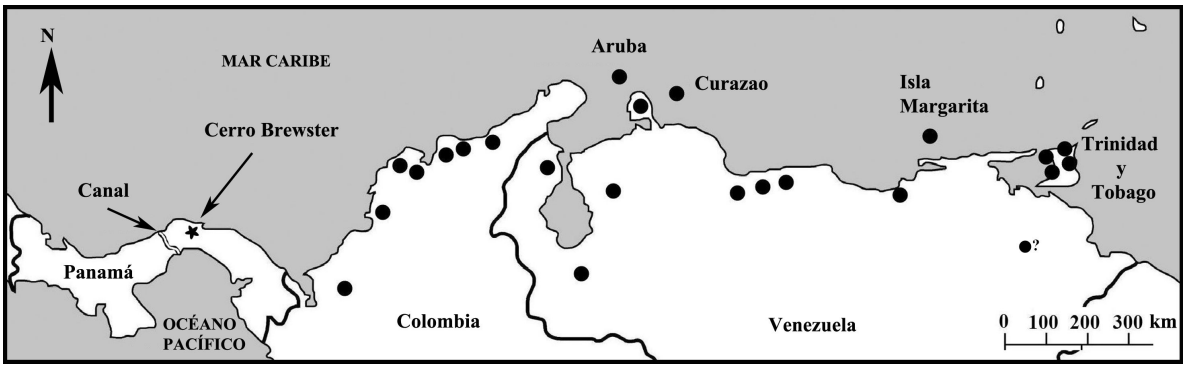

Figure 1. Distribution of *S. gigantea*. Star = New locality from Panamá; dots = Previously known distribution (Shelley & Kiser 2000).

The first author discovered one unidentified large scolopendromorph centipede from Panamá among the reference collections at the Museo de Invertebrados G.B. Fairchild, University of Panamá. Because of its size, we suspected it was *S. gigantea*, and the specific determination was confirmed using Shelley & Kiser (2000). This note is the first report of *S. gigantea* from Panamá.

Material studied: 1 male specimen. Panamá: Panamá Province, Parque Nacional Chagres, Cerro Brewster (=Cerro Guajaral), 25 October 1990, 850 m elevation, primary forest, collector Fernando Arosemena. Specimen depository (without collection number): Museo de Invertebrados G.B. Fairchild (MIUP), Laboratorio de Artrópodos Venenosos, Universidad de Panamá, Panamá, Panamá.

Description: Total length 17.8 cm, width 15.8 mm; antennae with 17 antennomeres, the 5 basal ones sparsely hirsute on both sides; tergal margination beginning on terguite 7; all legs with femoral spurs (Fig. 2-6). Although variation in size, antennal pilosity, ter-

gal margination, and femoral spurs in specimen from Panamá are within the ranges observed for the species (Shelley & Kiser 2000), the exemplar has few sparsely hirsute antennomeres, more legs with femoral spurs, and the margination begins in further back tergites; so we can not compare with other populations of this species registered by Shelley & Kiser (2000) in the Coastal Venezuela Province.

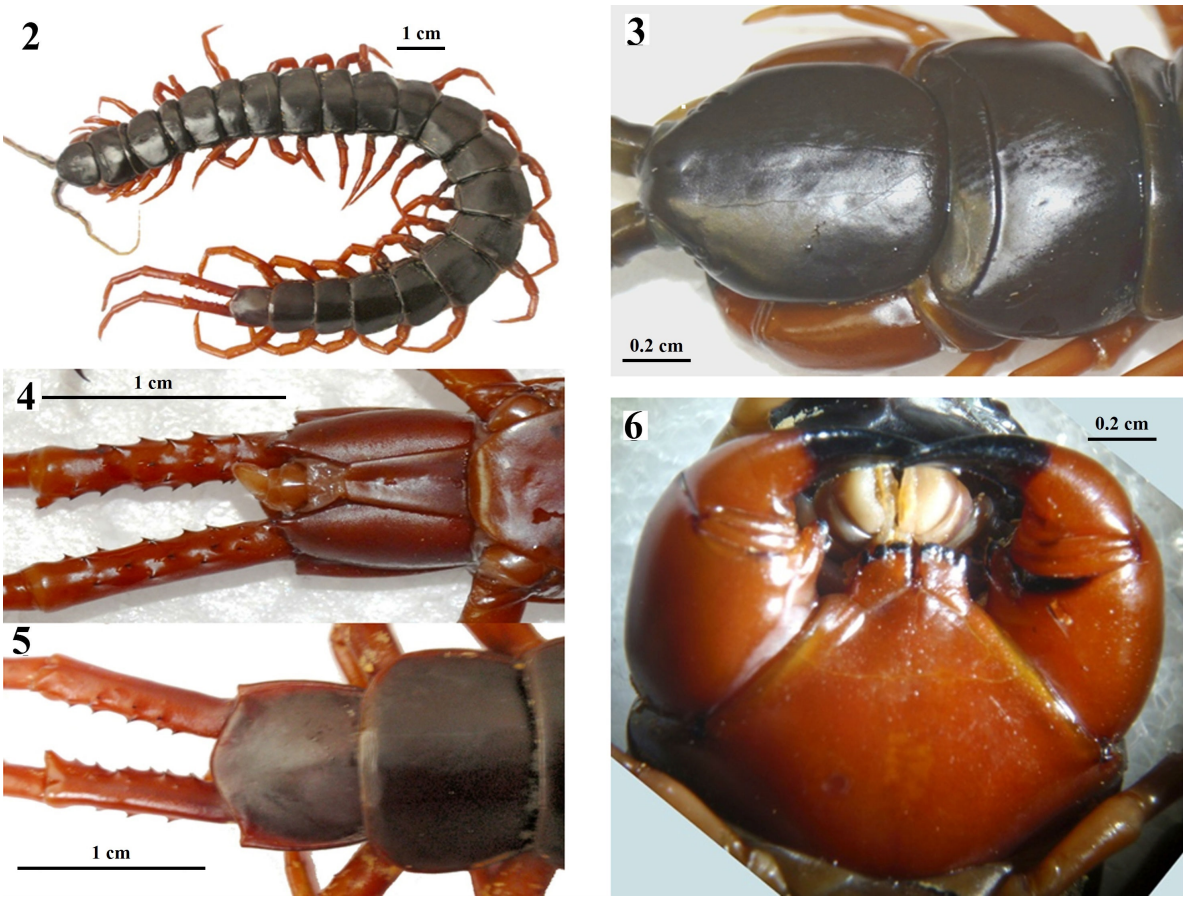

Figure 2-6. *Scolopendra gigantea.* 2) Specimen from Parque Nacional Chagres, Cerro Brewster, Panamá, dorsal view. 3) Cephalic plate and first two tergites, dorsal view. 4) Ultimate leg-bearing segment and postpedal segments; prefemur of ultimate pair of legs, ventral view. 5) Penultimate and ultimate leg-bearing segments, and basal articles, dorsal view. 6) Forcipules and forcipular coxosternite with transverse sulcus, ventral view.

Notes: This finding represents the most northwestern record of *S. gigantea* outside Coastal Venezuela Province, in a primary rainforest remote from human population settlements and with a very difficult access, clearly indicating that the specimen has not been product of an accidental human introduction (Fig. 1). The location is about 350 km Northwest of Montería Oeste, Córdoba, Colombia, the previous record closest to Panamá. This scolopendromorph registration in Panamá is expected, due to the wide distribution of the species and the biogeographic relationship with the provinces Chocó, Maracaibo and East Central

America (Morrone 2001).

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